AMESBURY
CITY HALL
62 Friend Street
Amesbury, MA 01913

Municipal Council
Special Meeting Minutes
Tuesday, April 22, 2014

Councilor McMilleon called the workshop to order at 6:33 p.m.

Roll Call was taken.
Present: Councilor Moavenzadeh, Councilor Bartley, Councilor Ferguson, Councilor Lavoie, Councilor McClure, Councilor McMilleon; and Councilor Kelcourse arrived at 6:36 p.m.
Absent: Councilor Sherwood and Councilor Sickorez.

Councilor Moavenzadeh led the Pledge of Allegiance

Bruce Skud approached the podium and read from the following, as submitted to the Clerk on April 22, 2014:

No More Fukushimas Statement on Seabrook Plant Safety before the Amesbury City Council
April 22, 2014

My name is Bruce Skud. I appreciate this opportunity to update you on public safety issues at the Seabrook plant.
Before I begin I'd like to give you some brief background. In 2011, Joanna Hammond of Amesbury and I co-founded No More Fukushimas to address safety issues at the Seabrook nuclear plant. A grassroots citizens' group, No More Fukushimas does not take a position in the debate over nuclear power, but we do vigorously speak out against conditions at the plant that impact public safety. I am joined today by Courtney MacLachlan of Amesbury, a member of No More Fukushimas.
As for my background, before retiring I worked for 30 years at the Government Accountability Office, the Congressional watchdog agency. I am not a nuclear engineer or a concrete expert, but I will draw on information from those who are experts in these fields.

In 2011, the Nuclear Regulatory Commission (NRC) revealed that foundation concrete at the Seabrook plant is degrading because of *alkali-silica reaction* (ASR), a chemical reaction that occurs when the concrete specific to the Seabrook plant is exposed to groundwater.
The Seabrook plant, which, as you know, is built in a salt marsh, has experienced groundwater infiltration since 1986 when the plant was constructed. The groundwater infiltration continues unabated, exacerbating the concrete degradation.
ASR causes expansion and cracking of the concrete, which over time can weaken the concrete and, in some situations results in corrosion and weakening of the steel reinforcing rods embedded in the concrete.
When the concrete expands and cracks, it creates fissures which become pathways for additional water infiltration and further degradation. The NRC now reports that ASR occurs throughout the plant's foundation, affecting 131 locations in the plant. Five safety-critical structures have been impacted by ASR, including the containment structure, which houses the nuclear reactor.
To provide additional perspective:

- ASR is an entirely novel problem at any US nuclear plant. It is a known phenomenon to industries that use concrete, such as the transportation industry, but the Seabrook plant is the only nuclear plant in the US where this problem has been identified.
- There is no known generally accepted technology for remedying or arresting the progression of ASR.

The NRC has officially stated that the plant is "degraded" but safe to operate in the short-term—*without defining what is meant by short-term*. At the same time, the NRC has stated it is not certain about the long-term reliability of the plant—even though the plant is plowing ahead with an application for a 20-year extension of its current 40-year operating license, from 2030 to 2050.

As a result, NextEra, the plant's owner, is conducting a study to assess ASR (at the University of Texas) which is being monitored by the NRC. However, the plant's study approach to assessing ASR conditions has been strongly challenged by the Union of Concerned Scientists as being inadequate.

I am citing the Union of Concerned Scientists here because it a renowned scientific organization that specializes in nuclear plant safety with a staff of nuclear scientists and it has contracted with a well-known university expert specifically to assess concrete at the Seabrook plant. In other words, we are drawing on scientific information.

The Union of Concerned Scientists is concerned that the study is inadequate, for example, because instead of testing core samples from actual concrete structures at the Seabrook plant, the plant's owner, NextEra, is relying instead on replica samples for testing. These concrete samples are supposed to closely resemble the specific concrete used at Seabrook. As the Union of Concerned Scientists points out, the behavior of the concrete depends on the specific chemical composition of the materials in it. This begs the question: Since the plant is not testing actual samples from the plant, how useful will the study results be?

Furthermore, a 2013 report by the National Institute of Standards and Technology –-which consists of the nation's top concrete and structural engineers—cited Seabrook Station as an example of where there simply isn't enough research to know exactly how to properly repair or manage ASR or predict the future structural integrity of a nuclear plant that suffers from it.[1]

In a December 18, 2013 letter to the NRC, a majority of the Massachusetts congressional delegation underscored that the National Institute report stated no tests are available that would enable the plant to predict the future structural integrity of Seabrook plant.

Collectively, these criticisms from high-level sources cause deep concern about the direction and value of the NextEra ASR study in protecting public safety.

Regulatory oversight by the NRC at Seabrook is in itself a serious problem. As I already mentioned, ASR is unique to Seabrook—and a novel problem for the NRC as well as the nuclear industry.

As a consequence, as the Union of Concerned Scientists has said, the NRC is in uncharted waters and does not have the in-house expertise or regulatory track record to make an informed decision to best protect the public from Seabrook.

This concrete degradation is a very serious threat now. At Fukushima, a low-probability event occurred when a tsunami struck and ruined the lives of 150,000 people due to radiation release. I am not making any predictions, but a 4.0 earthquake occurred in 2012 only 60 miles from Seabrook Station. What would have happened if the earthquake had been stronger and/or closer? Are we certain that the concrete foundation degraded by ASR in 131 places, including safety-critical structures would endure?

I would like to briefly cite some other significant safety problems involving the Seabrook plant:

- First, in 2012, as part of its biennial emergency drill, the NRC simulated a radiological release at the Seabrook plant. During the test, the plant failed to provide accurate information to state emergency officials confronted with having to make emergency decisions about evacuation. Emergency responders cannot do their job if the plant does not provide accurate information. Since the NRC announced the test in advance and the plant has been through the drill many times, it should have got it right. We hate to think what the consequences would have been had this been an actual radiological release.
- Second, speaking of evacuation, as we all know, summer traffic congestion and winter conditions, may pose insurmountable barriers to a speedy and safe evacuation during a radiological release.
- Third, it is important to note that Stanford University researchers have recently published the results of a study which states that Seabrook is the third most vulnerable plant in the US subject to potential flooding, storm surges and sea waves.

ASR and these significant safety concerns at the Seabrook plant pose an undue threat to public safety including our lives, our property, and our livelihoods.

For that reason, on behalf of the safety of your constituents, we ask you to write a letter to the NRC identifying the safety issues outlined today and urge the NRC to make the safety of your constituents their top priority.

In doing so, you would be joining the 50 federal, state, and local elected representatives in Massachusetts who have written or voiced their concern about Seabrook safety to the NRC. These include the majority of the current Massachusetts congressional delegation and Senator Kerry; Massachusetts State Senator O'Connor Ives and State Representative Costello, and State Senator Baddour; the councils or boards of selectmen from Ipswich, Merrimack, Newbury, Newburyport, Salisbury, and West Newbury, all of which signed and sent letters of concern, as well as the Mayors of Haverhill and Newburyport.

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[1] 2013 National Institute of Standards and Technology: Codes and Standards for Repair of Nuclear Plant Concrete Structures: Recommendations for Future Development Report.

Please add your voice to those elected representatives concerned about public safety at Seabrook by writing a letter to the NRC on your constituent's behalf.
Thank you.

Councilor McMilleon asked for questions from the council members.
Councilor Kelcourse said he would write a letter to the NRC expressing concern.
Councilor McMilleon asked why Seabrook is in this unique situation. Mr. Skud responded it was due to the type of aggregate mined.
Councilor McClure said letter should be written and hopes to move forward with the letter.
Councilor Lavoie asked about the integrity of the concrete, and nondestructive testing.
Councilor Ferguson asked about the use of nuclear power in Japan. Mr. Skud responded.
Councilor Ferguson asked about taking a tour of the Plant. Mr. Skud encourages the Council take a tour.

Councilor Kelcourse motioned that the City Council write a letter in support of those concerns that were expressed by Mr. Skud and his group this evening. Councilor McClure seconded.

Councilor Lavoie would prefer to see it as a resolution with the proposed letter and send it to Ordinance.

Councilor Kelcourse said he would make a call to Mr. Skud and put together a draft and introduce it to the Council and float it around, and sign it if it is appropriate.

Councilor McMilleon feels a resolution is the best way to do it, and act on it when all members of the council are present.

Councilor Kelcourse withdrew his previous motion and moved that this be continued to the next scheduled City Council meeting on May 13, 2014; and in the interim will contact Mr. Skud to put together a proposed draft. Councilor McClure seconded. It was voted unanimous.

Councilor McMilleon entertained a motion to adjourn. Councilor McClure moved the motion. Councilor Kelcourse seconded. It was voted unanimous.

The meeting adjourned at 7:05 p.m.

Respectfully submitted,

Dawne Warren
Administrative Assistant
Office of the City Clerk